

PATENT CLAIMS

1. Electrically operated door opener (1)
with a swivelable swing trap (4) for blocking or releasing a spring trap, with a movable catch lever (8),
with a change-over (7), which can be moved into a position blocking the swing trap (4) and a position releasing the swing trap (4), and
which is so arranged with the catch lever (8), that the change-over (7) can be locked in the blocking position by means of the catch lever (8);
with a position indicator for moving the control lever (8), for locking or releasing the change-over;
c h a r a c t e r i z e d i n t h a t
the position indicator comprises of an electromotor (16), at the motor axis of which, a centrifugal cam (17) is mounted, whereby the electromotor (16) is arranged with the control lever (8), so as to hit the centrifugal cam (17) against the control lever (8) on activation of the electromotor (16) due to the rotation of the motor axis, thereby causing the control lever (8) to move.
2. Door opener (1) according to claim 1,
c h a r a c t e r i z e d i n t h a t
the control lever (8) has a chamfer against which the centrifugal cam (17) hits on rotation, so as to thereby move the control lever (8) in the direction parallel to the axis of rotation.

3. Door opener (1) according to claim 1 or 2,
characterized in that
the centrifugal cam (17) has an eccentrically supported impact disc (18) with an external axis, which is supported on the centrifugal axis swivelably and rotatably in the direction of the axis of rotation.
4. Door opener (1) according to one of the claims 1 to 4,
characterized in that
the control lever (8) is held swivelably.
5. Door opener (1) according to one of the claims 1 to 4,
characterized in that
the change-over (7) is mounted with the swing trap (4), so as to move the change-over (7) on swiveling of the swing trap (4).
6. Door opener (1) according to one of the claims 1 to 5,
characterized in that
it has essentially an L-shaped form, whereby a first change-over shank (71) is coupled with the swing trap (4), so as to move the change-over on swiveling of the swing trap (4), and
whereby a second change-over shank (72) can be coupled with the control lever (8), whereby on locking of the change-over (7), the second change-over shank (72) is locked by the control lever (8), so that a movement of the change-over (7) is hindered on swiveling of the swing trap (4).
7. Door opener (1) according to claim 6,
characterized in that
the second change-over shank (72) has a first holding element (10), which is held with a second holding element (11) of the control lever (8) on locking, and which does not interact with the second holding element (11) on releasing.

8. Door opener (1) according to claim 7,
characterized in that
the control lever (8) is held swivelably, whereby the control lever (8) is so arranged that, on locking by the control lever (8) and on exertion of a swiveling force on the swing trap (4), the second change-over shank (72) exercises a force on the control lever (8) in the direction of the axis of the swing.
9. Door opener (1) according to one of the claims from 6 to 8,
characterized in that
the swing trap (4) is coupled with the change-over shank (71) in such a fashion, that on application of an opening force on the swing trap (4), a leverage is exercised on the change-over shank (71), whereby the leverage leads, on releasing by the control lever (8), to swiveling of the change-over (7).
10. Door opener (1) according to claim 9,
characterized in that
the first change-over shank (71) has a slope, against which a part of the swing trap (4) rests, so that on swiveling of the spring trap (4), a leverage acts on the first change-over shank (71).
11. Door opener (1) according to claim 10,
characterized in that
the change-over (7) is coupled with a spring element (13), so as to press the first change-over shank (71) against the part of the swing trap (4).
12. Door opener (1) according to one of the claims 6 to 11,
characterized in that
the first change-over shank (71) is smaller than the second change-over shank (72).

13. Door opener (1) according to one of the claims from 7 to 12,
characterized in that
the second change-over shank (72) is arranged with respect to the swing trap (4)
in such a manner as to move, on swiveling of the swing trap (4), the second
change-over shank (72) in the direction of the swing trap (4), if the change-over
(7) is released by the control lever (8).
14. Door opener (1) according to one of the claims from 1 to 13,
characterized in that
the electromotor (16) can be contacted by means of a terminal block (6), whereby
the terminal block (6) can be fastened at several points of the housing 2 of the
door opener (1).
15. Door opener (1) according to one of the claims from 1 to 14,
characterized in that
the swing trap (4) is constructed of two parts comprising of one basic element
(41), and one adjustable element (42) displaceable with respect to the former, and
that a movable element (21) is provided on the swing trap (4), which stands in
effective connection with a microswitch (20), so as to detect the latching of the
door-side spring trap into the swing trap (4).